

**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/394,514 09/13/99 OGAWA

T 0102/0074

EXAMINER

TM02/0713

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ART UNIT

PAPER NUMBER

2163

DATE MAILED:

07/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/394,514

Applicant(s)

OGAWA ET AL.

Examiner

C. Michelle Colon

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1 – 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Correction is required.

The drawings filed on September 13, 1999 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

2. **Correction of Informalities** – 37 CFR 1.85; 1097 O.G. 36

New formal drawings must be filed with the changes incorporated therein. The art unit number, application number (including series code) and number of drawing sheets should be written on the reverse side of the drawings. Applicant may delay filing of the new drawings until receipt of the "Notice of Allowability" (PTOL-37 or PTO-37). If delayed, the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability" to avoid extension of time fees. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a) for filing the corrected drawings (but not for payment of the issue fee). The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

3. **Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

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Applicant is required to submit acceptable corrected drawings within the three month shortened statutory period set in the "Notice of Allowability" (PTO-37). Within that three month period, two weeks should be allowed for review of the new drawings by the Office. If a correction is determined to be unacceptable by the Office, applicant must arrange to have an acceptable correction re-submitted within the original three month period to avoid the necessity of obtaining an extension of time with extension fees. Therefore, applicant should file corrected drawings as soon as possible.

Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Objections

4. Claim 1 is objected to because of the following informalities: The acronym "ETC" is not explained within claim 1. A brief description of the acronym "ETC" is required in parentheses immediately following the term. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 – 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hassett et al., patent number 5,406,275.

Claim 1 is anticipated by Hassett in col. 2, lines 55 – 62. Hassett discloses a highly directional antenna that transmits a radio-frequency signal. The radio signal broadcast creates a field pattern that is directed along a roadway. Hassett further discloses in col. 2, line 66 – col. 3, line 12 that a vehicle transceiver, once it reaches the antenna's radio

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signal field pattern at a fixed location along the roadway, by processing information received from the field pattern, can determine the vehicle's lane position as well as the vehicle's position relative to the antenna. Hassett further discloses in col. 3, lines 13 – 16 that the antenna can also receive radio-frequency signals from the vehicle transceiver to determine the type of vehicle that is oncoming. The antenna will not receive radio-signals from a vehicle transceiver if a vehicle transceiver does not cross the threshold along the roadway of the radio-frequency field pattern; therefore the antenna also acts as a vehicle sensor.

Claim 2 is anticipated by Hassett in col. 5, lines 21 – 24 where Hassett discloses that the radio-frequency generated by the antenna can be transmitted intermittently or continuously.

Claim 3 is anticipated by Hassett in col. 5, lines 18 – 21. Hassett discloses that the radio signal strength patterns can be altered to indicate a position relative to the antenna; therefore the signal length along the roadway can also be altered.

Claim 4 is anticipated by Hassett in Figure 3 and Figure 3's description. In col. 5, lines 15 – 21, Hassett discloses that the radio signal strength measurement used by his claimed invention corresponds to half the length of the defined roadway. Figure 3 indicates that the roadway has a length of 40 feet, half of which is 20 feet. Claim 4 indicates a radio-communication service zone of 6.5 meters along a lane, which equates to about 21.32 feet.

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Claim 5 is anticipated by Hassett in col. 2, lines 55 – 56 where Hassett discloses that at least one antenna is required. As discussed above, the antenna, in Hassett's embodiment, also acts as a vehicle sensor.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 – 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "standard" in claim 3 is a relative term which renders the claim indefinite. The term "standard" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "standard" in claim 3 as it relates to a vehicle is a relative term with various meanings depending on one's background, geographic location, and country of citizenship. Correction is required.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ray (P.N. 5,488,360) discusses a vehicle detection and identification system utilizing radio-frequency transmission to be used in a toll road system; Randelman et al. (P.N 5,072,380) discusses a system and method for

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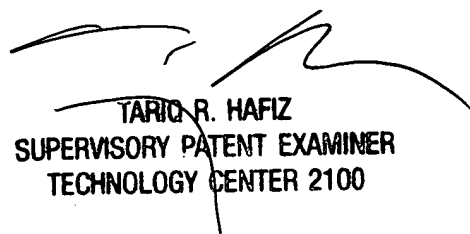
identifying a vehicle where communication between devices is through radio frequency signals; Dee et al. (P.N. 5,710,743) discusses a parking meter that utilizes a sensor for detecting a vehicle from a distant point.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Colon whose telephone number is 703-305-9643. The examiner can normally be reached Monday – Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6606.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

July 12, 2001
CMC



TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100